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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,457	03/24/2004	Mitsugi Chonan	032405.	2933
441	7590	05/15/2006		
SMITH, GAMBRELL & RUSSELL, LLP 1850 M STREET, N.W., SUITE 800 WASHINGTON, DC 20036			EXAMINER LE, DAVID D	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/807,457	Applicant(s) CHONAN ET AL.	
	Examiner David D. Le	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>03/04, 06/04, 02/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the second Office action on the merits of Application No. 10/807,457, filed on 24 March 2004. Claims 1 and 3-13 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Foreign Priority Document, received on 03/24/04
 - Information Disclosure Statement, received on 03/24/05
 - Information Disclosure Statement, received on 06/17/04
 - Declaration, received on 06/17/04
 - Power of Attorney, received on 09/15/04
 - Information Disclosure Statement, received on 02/21/06

Information Disclosure Statement

3. The information disclosure statement filed 21 February 2006 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; however, the listed JP11334393 is not in the file. Accordingly, the JP11334393 reference has not been considered.

Claim Objections

4. Claims 1, 10 and 11 are objected to because of the following informalities:

Claim 1:

- Line 13, “shaft arranged parallel to said primary shaft” should be amended as --shaft, and said crankshaft is arranged parallel to said primary shaft--.

Claim 10:

- Line 12, “shaft arranged parallel to said primary shaft” should be amended as --shaft, and said crankshaft is arranged parallel to said primary shaft--.

Claim 11:

- Line 12, “shaft arranged parallel to said primary shaft” should be amended as --shaft, and said crankshaft is arranged parallel to said primary shaft--.

Appropriate correction is required.

Double Patenting

5. Claim 13 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 9.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claim 10 is rejected under 35 U.S.C. 102(b) as being anticipated by U. S. Patent**

Application Publication No. US 2001/0007293 A1 to Yamauchi.

Claim 10:

Yamauchi (i.e., Figs. 3 and 4; paragraphs [0036] to [0049]) discloses a drivetrain comprising:

- a. A crankshaft driven (i.e., Fig. 4, element 34) by an engine (i.e., Fig. 4, element 7), said crankshaft being arranged in a vehicle body in a widthwise direction of the vehicle body (i.e., Fig. 3);
- b. A sub-shaft (i.e., Fig. 4, element 46) which is arranged parallel to said crankshaft and to which the rotation of said crankshaft is transmitted via a rotary transmission member (i.e., Fig. 4, being the combination of elements 41 and 47);
- c. A belt type continuously variable transmission (i.e., Fig. 4, element 50) including a primary shaft (i.e., Fig. 4, element 53) arranged concentrically with said sub-shaft and provided with a primary pulley (i.e., Fig. 4, element 51) having a variable groove width and a secondary shaft (i.e., Fig. 4, element 56), said secondary shaft being provided with a secondary pulley (i.e., Fig. 4, element 54) coupled to said primary pulley via a belt (i.e., Fig. 4, element 57) and having a variable groove width; and

- d. Wherein the rotation of said crankshaft is transmitted to said primary shaft via said sub-shaft, which is arranged parallel to said primary shaft, and said crankshaft is mounted with a generator (i.e., Fig. 4, element 43).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1, 3, 5-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi in view of U. S. Patent No. 5,193,634 to Masut.**

Claims 1, 3, 5-9 and 13:

Yamauchi (i.e., Figs. 3 and 4; paragraphs [0036] to [0049]) discloses a drivetrain comprising:

- a. A crankshaft driven (i.e., Fig. 4, element 34) by an engine (i.e., Fig. 4, element 7), said crankshaft being arranged in a vehicle body in a widthwise direction of the vehicle body (i.e., Fig. 3);
- b. A sub-shaft (i.e., Fig. 4, element 46) which is arranged parallel to said crankshaft and non-concentric with the crankshaft and to which the rotation of said crankshaft is transmitted via a rotary transmission member (i.e., Fig. 4, being the combination of elements 41 and 47);

- c. A belt type continuously variable transmission (i.e., Fig. 4, element 50) including a primary shaft (i.e., Fig. 4, element 53) arranged concentrically with said sub-shaft and provided with a primary pulley (i.e., Fig. 4, element 51) having a variable groove width and a secondary shaft (i.e., Fig. 4, element 56), said secondary shaft being provided with a secondary pulley (i.e., Fig. 4, element 54) coupled to said primary pulley via a belt (i.e., Fig. 4, element 57) and having a variable groove width;
- d. Wherein the rotation of said crankshaft is transmitted to said primary shaft via said sub-shaft, which is arranged parallel to said primary shaft, and said crankshaft is mounted with a generator (i.e., Fig. 4, element 43);
- e. Wherein said crankshaft is arranged in front of said primary shaft in a longitudinal direction of the vehicle body (i.e., Fig. 3);
- f. Wherein said secondary shaft is arranged behind said primary shaft in a longitudinal direction of the vehicle body (i.e., Fig. 3);
- g. Wherein said rotary transmission member is a pair of gears (i.e., Fig. 4, elements 41 and 47) mounted on said sub-shaft and said crankshaft; and
- h. A crankcase (i.e., Fig. 4, element 24) that mounts said crankshaft.

Yamauchi lacks:

- a. A centrifugal clutch member that is arranged between the sub-shaft and the primary shaft and housed in the crankcase.

Masut (i.e., Fig. 1; column 2, lines 42-53), on the other hand, teaches a hybrid propulsion system comprising:

- a. A centrifugal clutch member (i.e., Fig. 1, element 14); and
- b. Wherein the centrifugal clutch member is arranged between a shaft member (i.e., Fig. 1, element 16) and a pulley shaft member (i.e., Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify Yamauchi to include a centrifugal clutch such that the centrifugal clutch is arranged within the crankcase (24) between the sub-shaft (46) and the primary shaft (53), in view of Masut, in order to provide a disengagement between the engine and the transmission during the start-up of the engine.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi in view of U. S. Patent Application Publication No. US 2002/0033295 A1 to Korenjak et al.

Claim 11:

Yamauchi (i.e., Figs. 3 and 4; paragraphs [0036] to [0049]) discloses a drivetrain comprising:

- a. A crankshaft driven (i.e., Fig. 4, element 34) by an engine (i.e., Fig. 4, element 7), said crankshaft being arranged in a vehicle body in a widthwise direction of the vehicle body (i.e., Fig. 3);

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- b. A sub-shaft (i.e., Fig. 4, element 46) which is arranged parallel to said crankshaft and to which the rotation of said crankshaft is transmitted via a rotary transmission member (i.e., Fig. 4, being the combination of elements 41 and 47);
- c. A belt type continuously variable transmission (i.e., Fig. 4, element 50) including a primary shaft (i.e., Fig. 4, element 53) arranged concentrically with said sub-shaft and provided with a primary pulley (i.e., Fig. 4, element 51) having a variable groove width and a secondary shaft (i.e., Fig. 4, element 56), said secondary shaft being provided with a secondary pulley (i.e., Fig. 4, element 54) coupled to said primary pulley via a belt (i.e., Fig. 4, element 57) and having a variable groove width; and
- d. Wherein the rotation of said crankshaft is transmitted to said primary shaft via said sub-shaft, which is arranged parallel to said primary shaft, and said crankshaft is mounted with a generator (i.e., Fig. 4, element 43).

Yamauchi lacks:

- Wherein said sub-shaft is mounted with a recoil starter.

Korenjak (i.e., Fig. 1; paragraph [0138]), on the other hand, teaches a drivetrain for an all terrain vehicle comprising:

- A redundant starting system including a recoil starter (i.e., Fig. 1, element 66), mounted on a shaft member (i.e., Fig. 1, element 12), which is coaxial with the primary shaft of the primary pulley.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify Yamauchi to include a recoil starter such that the recoil starter is arranged on the sub-shaft, in view of Korenjak, in order to facility the start-up of the engine when the starter motor is inoperative.

11. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi in view of Masut as applied to claims 1, 3, 5-9 and 13 above, and further in view of Korenjak et al.

Claims 4 and 12:

Yamauchi in view of Masut discloses the limitations as set forth in paragraph 9 above. Regarding claims 4 and 12, Yamauchi lacks a recoil starter, which is mounted on the sub-shaft.

Korenjak (i.e., Fig. 1; paragraph [0138]), on the other hand, teaches a drivetrain for an all terrain vehicle comprising:

- A redundant starting system including a recoil starter (i.e., Fig. 1, element 66), mounted on a shaft member (i.e., Fig. 1, element 12), which is coaxial with the primary shaft of the primary pulley.

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify Yamauchi to include a recoil starter such that the recoil starter is arranged on the sub-shaft, in view of Korenjak, in order to facility the start-up of the engine when the starter motor is inoperative.

Response to Arguments

12. Applicant's arguments with respect to claims 1 and 3-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 571-272-7092. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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